

# Industry Efforts on NUMARC 93-01, Rev. 4 Implementation

NRC Public Meeting

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# Major Activities Outlined in Guidance on Fire Risk

- Identification of equipment found to have an appreciable impact on core damage mitigation for fire initiators
- Implementation of risk management actions, when appropriate, for equipment identified above
- Development of communication plan among plant personnel
  - Fire protection
  - Work management
  - Risk assessment



# Identification of Equipment to Include in Process

- Should be based on plant-specific evaluations
- Two sources of information to support evaluation identified
  - Safe shutdown equipment
  - Quantitative analysis (e.g. FIVE, FPRA)

# Implementation of Risk Management Actions

- Risk management actions developed for equipment identified in first step
- Several options for determining when to implement
  - ICDP adjustment factor/raising risk management action threshold
  - Unavailability duration
  - Quantification of internal events and internal fires risk

# Communication Plan Development

- Plant personnel responsible for related activities should
  - Communicate
  - Maintain awareness of their respective risk management actions
- Maintain integrated perspective of these activities

# Pilot Process

- Tabletop pilots (Summer/Fall 2010)
  - Purpose
  - Participants
  - Process
  - Use of results
- Full-scope pilots (Summer/Fall 2011)
  - Purpose
  - Process
- Workshops

# Tabletop Pilots - Purpose

- Test draft approaches in NEI guidance
- Identify approaches that
  - Have appropriate impact on plant processes
  - Enhance safety
  - Produce defensible results
- Share potential implementation approaches with operating fleet

# Tabletop Pilots - Participants

- Selected to ensure diversity in guidance implementation approaches
  - BWR and PWR
  - FPRA-supported approaches and SSEL-supported approaches
- Participants
  - Hatch
  - Palo Verde
  - Salem
  - Three Mile Island
- Each tabletop pilot plant will discuss their approach and results today



## Tabletop Pilots - Process

- Each plant reviewed guidance and considered plant-specific implementation
- Selected potential approaches for
  - Scoping equipment into process
  - Developing risk management actions and criteria for implementation
  - Organizational communication
- Regular discussions with all pilots to review intermediate results and peer-check
- No plant processes changed

## Tabletop Pilots – Use of Results

- Evaluation of impact on plant processes
- Estimation of appropriate resource dedication
- Assurance that guidance is practical and meets objectives
- Dissemination of information regarding potential methods implement guidance to operating fleet

## Full Scope Pilots - Purpose

- Utilize approaches and methods similar to those developed by tabletop pilots
- Evaluate implementation process real-time
- More precisely assess
  - Impact on plant programs and processes
  - Resource needs
- Provide feedback to refine implementation

## Full Scope Pilots - Process

- Identify methods and approach to be used
- Evaluate potential implementation and impact for one maintenance cycle
  - Still “beta testing”
  - Can be retrospective
- Re-evaluate implementation approach as necessary
- Fully implement at site for 4-6 weeks

# Workshops

- Industry planning two workshops to assist with implementation
  - August 15-17, 2011
  - Summer 2012
- Purpose is to assist utilities in developing programs in advance of implementation date for RG 1.160, Rev. 3
- NRC participation desired

## Conclusions

- Industry actively working to develop methods to support effective implementation of NUMARC 93-01, Rev. 4
- Pilot process underway
  - Tabletop
  - Full scope
- Workshops planned